

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of the claims in the applications.

Listing of Claims:

44. **(Currently amended)** A device, comprising:

a wafer having a wafer surface patterned to comprise an integrated component and an optical grating coupler, the optical grating coupler operable to couple light incident from a device above the wafer into the integrated component; and

at least one optical alignment structure fabricated on the wafer surface and spatially separated from the optical grating coupler with a predetermined spatial offset, the optical alignment structure operable to direct at least a portion of incident light along a predetermined direction above the wafer surface to optically mark a relative position of the optical grating coupler.

45. **(Original)** The device as in claim 44, wherein the optical alignment structure is optically retro-reflective.

46. **(Original)** The device as in claim 44, wherein the optical alignment structure comprises an optical grating.

47. **(Original)** The device as in claim 44, wherein the optical grating is a Littrow grating.

48. **(Original)** The device as in claim 44, wherein the optical alignment structure is shaped as a dot.

49. **(Original)** The device as in claim 48, further comprising a second optical alignment structure having a line shape located relative to the dot.

50. **(Original)** The device as in claim 44, wherein the wafer further comprises an integrated electronic circuit element on the wafer surface.

51. **(Original)** The device as in claim 44, wherein the optical alignment structure comprises an optical device on the wafer.

52. **(Original)** The device as in claim 51, wherein the optical device comprises a waveguide and at least one optical coupler engaged to one end of the waveguide to couple light incident from a device above the wafer into the waveguide.

53. **(Original)** The device as in claim 44, wherein the optical coupler comprises a grating coupler.

54. **(Original)** The device as in claim 44, wherein the integrated component comprises a waveguide.

55. **(Original)** The device as in claim 44, wherein the integrated component comprises an optical detector.

56. **(Original)** The device as in claim 44, wherein the integrated component comprises an optical modulator.

57. **(Original)** The device as in claim 44, wherein the integrated component comprises an optical wavelength division multiplexer.

58. **(Original)** The device as in claim 44, wherein the integrated component comprises an arrayed waveguide grating.

59. **(Original)** The device as in claim 44, wherein the integrated component comprises an optical switch.

60. **(Original)** The device as in claim 44, wherein the integrated component comprises an optical directional coupler.

61. **(Original)** The device as in claim 44, wherein the integrated component comprises an optical splitter.

62. **(Original)** The device as in claim 44, wherein the integrated component comprises an optical amplifier.

63. **(Original)** The device as in claim 44, wherein the integrated component comprises an optical attenuator.

64. **(Original)** The device as in claim 44, wherein the wafer is patterned to comprise a plurality of dice, wherein at least one die is patterned to comprise the integrated component and the optical coupler and to further comprise an integrated electronic circuit.

65. **(Original)** The device as in claim 64, wherein the integrated electronic circuit controls an operation of the integrated component.

66. **(Original)** The device as in claim 44, wherein the optical alignment structure comprises an optical waveguide comprising input and output ports that are located adjacent to the integrated component, and wherein the input port comprises an input optical coupler to couple incident light into the optical waveguide and the output port comprises an output optical coupler to couple light out of the output port to optically mark the relative position of the optical coupler.

67. **(Original)** The device as in claim 44, wherein the optical alignment structure is an elongated optical alignment line structure, and the device further comprising a second optical

alignment structure in a dot shape and spaced from and aligned with the elongated optical alignment line structure.

68. **(Original)** The device as in claim 44, wherein the optical alignment structure has a spatially varying reflectivity profile.